



PROGRESS REPORT NO. 173

TO: Robert Tan, U.S. Environmental Protection Agency (EPA) – via Electronic mail
Kathryn Cerise, EPA – via Electronic mail

FROM: Denise Mills, Teck American Incorporated (TAI)

Cc: Kris McCaig, TAI – via Electronic mail
Rob Orr, TAI – via Electronic mail

DATE: December 4, 2020

FILE NO: 01-773180-000

RE: Upper Columbia River (UCR) Remedial Investigation/Feasibility Study
(RI/FS) - Progress Report No. 173 Month Ending November 2020

Pursuant to Paragraph 39 of the June 2, 2006 Settlement Agreement (Agreement), the following is intended to provide a summary of activities completed during the past month in compliance with the aforementioned Agreement. It is also intended to provide a brief summary of pending and on-going activities.

Soil Amendment Technology Evaluation Study (SATES):

TAI continued coordinating project activities with the SATES team and Robert Tan, Remedial Project Manager for the Region 10 Superfund & Emergency Management Division, during the month.

The Ohio State University (OSU) laboratory completed the analysis of the Phase II bench-scale testing time point 3 (t3) soil samples collected on March 11, 2020 and analytical results are being validated by the third-party data validator. TAI will deliver these results to EPA after validation is complete. The t3 results will be incorporated into the draft Phase II Data Summary Report (DSR) currently being prepared for the study. TAI's field team mobilized to Northport on November 3, 2020 for the Phase III amendment application. Field work continued through November 14, 2020, but was stopped for the year due to inclement weather and associated safety concerns. Amendment application was completed at only test plot 258-3 during this time. Amendment application to the other three test plots and the initial Phase IV soil sampling event will be completed in Spring 2021. TAI prepared Change Request No. 2 to document the decision to postpone these

activities and submitted it to EPA for review via email on November 16, 2020. As of this writing, TAI revised the change request in response to EPA comments received via email on November 30, 2020, and EPA approved the revised change request on December 3, 2020.

Baseline Ecological Risk Assessment (BERA):

Weight of evidence (WOE) – TAI distributed presentation materials to EPA’s team on November 2, 2020 that summarized the results of the WOE example exercise TAI completed using the Tri-State Mining District dataset recommended by EPA and that was done to demonstrate the WOE approach agreed upon by TAI and EPA. TAI presented the results for discussion with EPA during a call on November 10, 2020. EPA provided suggestions on the WOE approach via email on November 20, 2020.

Soil Toxicity Reference Values (TRVs) – TAI provided a draft technical memorandum to EPA on September 18, 2020, which summarized the results of implementation of the soil TRV development approach Steps 1 through 6, as described in the “Final Approach for Evaluating the Potential for Metals Toxicity to Plants and Invertebrates in the Baseline Ecological Risk Assessment (May 2019).” EPA provided comments on the draft technical memorandum in a letter delivered to TAI via electronic mail on November 9, 2020.

2019 Phase 3 Sediment Study:

Backscatter Electron Microscopy (BSEM) –EPA approved the revised final draft BSEM data report on November 2, 2020. The final BSEM data report will be included as an Appendix to the draft 2019 Phase 3 Sediment Study DSR.

Toxicity Identification Evaluation (TIE) Pilot Study – TAI submitted the addendum to the Draft TIE Pilot Study report to EPA electronically on November 23, 2020, along with the draft pilot study report that was originally submitted to EPA on September 19, 2019. The report addendum focuses on the additional TIE experiments performed since March 2020.

Bioassay Testing – TAI submitted the bioassay biological endpoint and bioassay porewater and sediment analytical chemistry data deliverable to EPA on October 30, 2020. The bioassay biological laboratory data report will be included as an appendix to the draft 2019 Phase 3 Sediment Study DSR. As of this writing, EPA provided, via the U.S. Geological Survey Columbia Environmental Research Center, provisional 2019 Phase 3 Sediment Study split sample bioassay and chemistry data to TAI on December 2, 2020. EPA is currently reviewing and validating these results.

2019 Phase 3 Sediment Study DSR – TAI continued to work on the draft DSR, which will be submitted to EPA on or before January 4, 2021.

Human Health Risk Assessment – TAI coordinated with Teck Metals Ltd. to obtain additional documentation on the operation, maintenance, and performance of Teck's Columbia Gardens air quality monitoring station, in response to EPA's November 9, 2020 request for the additional information. TAI is on track to deliver this information to EPA in December 2020.

Should you have any questions or require any additional information, please do not hesitate to contact me at 509-623-4515.